XXXII.—Field-notes on Birds collected in the Philippine Islands in 1893-6.—Part III. By John Whitehead.

[Continued from p. 246.]

d, PICARIÆ and PSITTACI.

205. CHÆTURA PICINA Tweedd. (Grant, Ibis, 1897, p. 242.)

Fairly common among the mountains of Northern Leite, but difficult to obtain, owing to the height and pace at which the birds fly, and to the want of open space to shoot at them.

Iris dark brown; bill black; legs lead-grey.

In Leite, Luzon, and Catanduanes I saw, on several occasions, a large Swift, either *C. gigantea* or *C. celebensis*, flying very high. In Negros, on the morning I left Canloön, one of these Swifts was in numbers over a sugar-cane plantation that was being harvested.

206. Collocalia linchi Horsf. & Moore. (Grant, Ibis, 1895, p. 462.)

Met with among the pine-forests of North Luzon at an altitude of 7500 feet.

The various Swifts found in the Philippines probably occur in all the larger islands, but as they mostly fly at great heights and over country where, if dropped by a shot, it would be next to impossible to find them, the genus is somewhat neglected by naturalists.

207. Collocalia fuciphaga (Thunb.). (Grant, Ibis, 1895, p. 461; 1896, p. 555.)

Was obtained at nearly 7000 feet on Monte Data and also in Negros.

208. Collocalia troglodytes G. R. Gray. (Grant, Ibis, 1897, p. 243.)

Fairly common in Leite.

209. Collocalia whiteheadi Grant, Ibis, 1895, p. 459. Obtained near the summit of Monte Data.

Iris brown; bill black; feet brown.

210. MACROPTERYX COMATA (Temm.). (Grant, Ibis, 1894, p. 409; 1896, p. 555.)

This Tree-Swift is fairly common and found throughout the large islands.

211. Caprimulgus manillensis G. R. Gray. (Grant, Ibis, 1894, p. 518; 1895, p. 462; 1896, p. 121.)

Common in Luzon in open districts, especially near the sea if the coast is flat and sandy; in such localities it nests in the sea-drift just above high-water mark. It was met with in the mountains of Benguet up to 4000 feet. The note of this Nightjar is very loud, and may be written "tōk-tōk-tōk." No member of this genus has yet been recorded from Samar or Leite; but in the former island I saw a Nightjar several times, and in Leite I had a shot at one in the mountains as it flew over my house one evening.

212. Caprimulgus griseatus Gray. (Grant, Ibis, 1895, p. 462.)

The Small Grey Nightjar is fairly common in sandy districts in North Luzon. Our first specimen was obtained one evening in Catanduanes, flying over some sandy grasscountry near the sea-coast. The following February, however, we met with this Nightjar in numbers; it frequented the dried-up course of the Abra river, among the easuarinatrees and coarse grass which grew in the sandy soil brought down by the floods in the wet season. One is first attracted to this species by its peculiar note, which is a curious short whistle. This note is uttered only when the bird is on the wing at dusk, and when it is quite invisible, from its habit of flying low over the sand. It rests on the sand from time to time, remaining perfectly quiet. As the bird seldom shows above the sky-line it is difficult to shoot. At Cape Engaño I met with a pair of this Nightjar nesting on the sea-shore among the sea-drift, which here consists of huge forest-trees. The eggs, two in number, were laid on the sand close beside a tree-trunk. After flushing the birds I left the eggs until the return of the owners.

Though this species has not been recorded from Negros,

I am quite sure it will be met with on that island, as during a long ride one night over some barren sandy ground I repeatedly heard its note.

Iris black; bill and feet brown.

213. Lyncornis Macrotis (Vigors). (Grant, Ibis, 1894, p. 519; 1895, p. 463.)

Fairly common in the lower valleys in the mountainous districts of North Luzon. This species has the pretty habit of its Malay cousin, L. temmincki. Just at the last moment of the tropical day, when the highest heavens are tinged with the soft light of the setting sun, Lyncornis leaves its bed among the dead leaves and grass and flies high into the air, rising and descending with vertically-held wings, uttering every now and then its pretty whistle, "Tet-ā-bow, tet-ā-bow." But soon, when the last rays have ceased to gild the sky, it descends to mother earth to feed on winged insects, its pretty note being then exchanged for a frog-like croak. Towards sunrise Lyncornis once more rises to the heavens and utters the same "Tet-ā-bow," but it shortly dives to the ground, and rests unseen until the evening light again tempts it from its coneealment.

Either this species or an allied one occurs in the mountains of Mindoro, as I often heard its evening cry when camped out at 4500 feet. I have little doubt that I saw one of the genus in Samar, though I never heard it.

214. Lyncornis mindanensis Tweedd. (Grant, Ibis, 1894, p. 519.)

One specimen obtained in Benguet at an altitude of 3000 feet, where it was flying in company with *L. macrotis*, which was much more plentiful. Whether these two species are distinct or not is an open question. They are certainly very similar and frequent the same district, so that it is rather difficult to believe that two forms so closely allied are really distinct. Apart, however, from the slight differences in coloration, this species seems to be a slightly smaller bird.

215. Batrachostomus microrhynchus Grant, Ibis, 1895, p. 463; 1896, p. 121.

Two specimens were obtained by us on the summit of Monte Data at an altitude of 7500 feet, and a third on the coast-level at Cape Engaño. The finding of all specimens of this genus is a mere chance, the birds perching by day in the thickest and most tangled masses of undergrowth, which they seldom leave, even when disturbed.

Iris dull creamy yellow, speckled with brown on the outer edge; upper mandible dull brown; lower mandible and inside of mouth dull yellow; feet creamy white.

216. Eurystomus orientalis (Linn.). (Grant, Ibis, 1894, pp. 409, 519; 1895, p. 114; 1896, pp. 122, 555; 1897, p. 243.)

Widely distributed throughout the entire group. Frequenting the edges of forest, and especially partial to dead trees left standing in old clearings.

217. Merops bicolor Bodd. (Grant, Ibis, 1894, pp. 409, 519; 1897, p. 243.)

Distributed widely throughout the Philippines. I noticed a very large nesting colony on the Rio Grande (North Luzon), a steep sandy bank being riddled with holes; the birds were flying in and out of the holes in dozens, and made a beautiful picture in the bright sunshine.

218. Merops Philippinus Linn. (Grant, Ibis, 1894, p. 520.)

As widely distributed throughout the islands as *M. bicolor*, but has also an extended range over the Malay Archipelago, *M. bicolor* being the true Philippine Bee-eater. Curiously, no species of Bee-eater has hitherto been obtained in Palawan or Balabac, two islands of which the ornis is comparatively well known, and which have the genus *Merops* common to the west and to the south of them. We met with *M. philippinus* in Benguet at nearly 5000 feet.

Iris lake; bill and feet black.

219. Alcedo ispida var. bengalensis.

Alcedo ispida Linn. (Grant, Ibis, 1894, pp. 409, 520.)

A winter migrant, which spreads over the whole archipelago. This Kingfisher was fairly common on a small river at an altitude of 4000 feet in North Luzon.

220. ALCYONE CYANIPECTUS (Lafr.). (Grant, Ibis, 1895, p. 112; 1896, p. 471.)

Ceyx cyanipectus, Lafr. (Grant, Ibis, 1894, p. 520.)

Fairly common on most rivers and streams. In North Luzon this Kingfisher frequents rocky streams, and about sunset used to leave the seclusion of the thick bushes on the edges of the water and perch on the rocks in mid-stream. A native told me that this little bird sometimes falls a victim to the large fishing monitor lizards when diving into the stream after its food. The habits of all the Philippine Aleyones met with by us are similar: they frequent the clear streams inland, perching in the dense overhanging growth, which is met with on all tropical rivers. The birds are often difficult to obtain, from their habit of taking refuge in such places when alarmed. I found a nest of A. cyanipectus containing freshly-hatched young in North Luzon on 26th May.

Jr. Iris and bill dull black; feet pale pink.

221. ALCYONE NIGRIROSTRIS B. & W. (Grant, Ibis, 1896, p. 556.)

Was met with in Negros, where, however, it seemed to be rare.

Iris and bill black; feet coral-red.

222. ALCYONE FLUMINICOLA (Steere). (Grant, Ibis, 1897, p. 244.)

A few specimens of this beautiful Kingfisher were obtained in Central Samar. This species was also observed on one occasion in Leite.

Iris and bill black; feet coral-red.

223. Pelargopsis gouldi Sharpe. (Grant, Ibis, 1896, p. 470.)

We found this species fairly common on the Baco river in Mindoro, where, in November, it was in perfect plumage.

224. Pelargopsis gigantea Walden. (Sharpe, B. M. C. xvii. p. 100; Grant, Ibis, 1897, p. 210.)

Fairly common in the mangrove-swamps in Samar—my specimens being unfortunately lost in the 'Wieland.'

225. Ceyx melanura Kaup. (Grant, Ibis, 1895, p. 114.) The Ceyx group of Kingfishers are inhabitants of the forest, rivers and streams being apparently non-essential to their well-being. Compared with the numbers of C. euerythra that may be met with in a Bornean forest these Kingfishers are somewhat rare in the Philippines; in three years in Luzon and other islands we succeeded in collecting only some six specimens of this genus.

Iris black; bill and feet vermilion.

226. Ceyx samarensis Steere. (Grant, Ibis, 1897, p. 243.) Three specimens of this species were obtained by us in the Samar forests.

Iris black; bill and feet vermilion.

227. HALCYON COROMANDUS (Lath.). (Grant, Ibis, 1896, p. 122.)

This widely-distributed species was met with by us at Cape Engaño, in the mangrove-swamps near the coast.

228. HALCYON CHLORIS (Bodd.). (Grant, Ibis, 1896, p. 556; 1897, p. 245.)

Common and widely distributed throughout the entire group; generally met with on the sea-coast, but occasionally some distance inland.

229. HALCYON GULARIS (Kuhl). (Grant, Ibis, 1894, pp. 409, 520; 1896, p. 556; 1897, p. 244.)

This species has been recorded from all the larger islands of the group, but curiously has not yet extended its range into Palawan and the Calamianes. In Luzon it is met with in all open country where water is plentiful, even on the river in Benguet at over 4000 feet. At Cape Engaño I found a nest containing five almost fully-fledged young on the 7th May. The nest was in the high bank of a river.

230. HALCYON WINCHELLI Sharpe. (Grant, Ibis, 1896, p. 556.)

We met with this beautiful species on only one occasion in Negros. During a collecting-ramble I noticed a bird hammering something it had captured on the topmost branch of a high tree; a lucky shot brought the bird to the ground, and it proved to be of this species.

Iris dark brown; bill black, base of lower mandible dull white; feet dull light olive-yellow.

231. HALCYON MOSELEYI Steere. (Grant, Ibis, 1896, p. 557.)

We met with three male specimens of this fine species at the base of Canloön volcano; the birds were shot in the forest in the vicinity of a river. This species, both in appearance and habits, is much nearer to *Carcineutes* than to *Halcyon*. *H. moseleyi* has hitherto been met with only in Negros.

Iris dark brown; upper mandible black, with a yellow ridge; lower mandible pale king's yellow; feet olive-yellow.

232. Hydrocorax hydrocorax (Linn.). (Grant, Ibis, 1894, p. 520.)

Common in North Luzon, where it is known to the Spaniards as the "Calāū"; in fact, whenever I met a Spaniard he always began to describe this bird to me, and wanted to know if I had ever seen it. I may say that the Calāū is one of the noisiest of birds; if a small flock were within half a mile it would be difficult for the most ordinary observer to escape hearing and seeing it. So, perhaps, for this reason the Spaniards have observed it too. These large Hornbills are often met with in small flocks, accompanied by their white-speckled young; they fly from forest to forest, their powerful wing-beats being heard at a great distance. A few quick strokes, followed by a long soar, is their mode of

progression. On the wing, and especially on reaching their destination, they make as much noise as possible; the loud "kang-haw, ha-hāw-how" may be heard at the distance of nearly a mile, and echoes through the too often silent forests. On skinning most species of Hornbills the loose way in which the skin is attached to the flesh, especially on the breast and neck, is very remarkable, and gives one the idea that the bird may perhaps have the power of inflating itself during flight.

The whole of the plumage and the bare skin on the face are thickly covered with a yellow oily powder (obtained from the oil-gland), which comes off very easily and spoils the look of the bird after skinning.

Adult. Iris white; bill dull scarlet; feet vermilion.

Juv. (not quite adult). Iris hazel; bill dull red; feet reddish brown.

233. Hydrocorax semigaleatus (Tweedd.). (Grant, Ibis, 1897, p. 245.)

This Hornbill is closely allied to the preceding species, and its habits are similar. That no member of this genus has been obtained in Mindoro is one of the remarkable facts in the distribution of Philippine birds.

Ad. Iris pale yellow; basal half of bill bright lake-red, rest of bill yellowish white; feet dull brick-red.

Jr. (1st plumage). Iris brown; bill black; feet brownish red.

234. Penelopides Manillæ (Bodd.). (Grant, Ibis, 1894, pp. 409, 520.)

The small Philippine Hornbills are always one of the ornithological features of the various Philippine Islands. They are often remarkably distinct from one another, considering the small sea-space that divides the different species.

The note and habits of the whole genus are similar. They frequent old forest, but are very partial to overgrown clearings, where they may be met with in small flocks. In North Luzon I once met with a flock of this species on the wing: they were crossing a wide plain in the great heat of

the day, and had their bills open, as if suffering from the sun and fatigue. This flock was doubtless moving to more suitable feeding-grounds.

The note resembles the sound of a penny trumpet; it may be written "tot-toot, tūt-tūt."

The flight is like that of *Hydrocorax*—a few swift upward strokes, followed by a long, slightly inclined soar.

235. Penelopides samarensis Steere. (Grant, Ibis, 1897, p. 245.)

Common in Samar and Leite.

236. Penelopides mindorensis Steere. (Grant, Ibis, 1896, p. 471.)

Met with in Mindoro.

Iris dark red-brown; bill brownish yellow, with black barrings, white at the base; bare skin on face pale bluish white; feet dull black.

237. PENELOPIDES PANINI (Bodd.). (Grant, Ibis, 1896, p. 557.)

Common at the base of Canloon volcano, Negros.

Male. Iris red-brown; face-skin bluish white; feet dark olive-brown. The male has the bare skin on the sides of the bill whiter than the female. The bill in this genus shows little change after death.

238. Cranorrhinus waldeni Sharpe. (Grant, Ibis, 1896, p. 557.)

This genus is very distinct in habits from Hydrocorax. Instead of the powerful penetrating cry of Penelopides, Cranorrhinus has a bleating note, somewhat like the cry of a goat. All the birds I saw in the forests of Negros were solitary and frequented the highest trees. The most interesting difference, however, is that, while Hydrocorax smothers himself in yellow powder, Cranorrhinus never uses powder at all, the bare skin on its face being bright yellow without the assistance of the powder-puff. I did not obtain any young birds, which should prove most interesting.

Iris golden lake-brown; bill of various shades of vermilion,

pink, and orange; bare skin on face bright sulphur-yellow; feet dusky brown, soles of feet olive-yellow.

239. HARPACTES ARDENS (Temm.). (Grant, Ibis, 1896, p. 123; 1897, p. 245.)

This Trogon apparently occurs only in the most eastern islands of the Philippines, being found from the extreme north of Luzon to Basilan.

At Cape Engaño it was fairly common in the thick forests; it is not rare in Samar and Leite.

Iris dark brown; orbital skin deep French blue; base of bill light green fading into pale yellow, with the tip bright king's yellow; feet French blue, nails and part of the toes yellowish brown.

240. IYNGIPICUS VALIDIROSTRIS Blyth. (Grant, Ibis, 1895, p. 114; 1896, pp. 123, 471.)

Iyngipicus maculatus. (Grant (nec Scop.), Ibis, 1894, p. 520.)

Fairly common in Luzon, especially in the mountainous districts, where it is to be met with as high as 7500 feet. This species, like the rest of the genus, is more common on the edges of the forest and in sparsely wooded country, especially if a number of dead trees are left standing. We met with *I. validirostris* in Catanduanes and in the mountains of Mindoro up to 5000 feet.

Iris dark brown; upper mandible and half of lower black, basal half of lower mandible greenish yellow; feet dull olive-green.

241. IYNGIPICUS MACULATUS (Scop.). (Grant, Ibis, 1895, p. 115; 1896, p. 557.)

Rather scarce at the base of Canloön volcano, Negros, only one male and three females being obtained.

Iris brown; upper mandible and half of lower slaty black, the basal half of the lower dull white; feet olive-green.

242. IYNGIPICUS LEYTENSIS Steere. (Grant, Ibis, 1897, p. 245.)

Fairly common in Samar and Leite.

243. Chrysocolaptes hæmatribon (Wagl.). (Grant, Ibis, 1894, p. 520.)

This species is common in the mountainous districts of North Luzon, being met with up to 7500 feet. It is generally found in true forest, but is also met with on dead timber in open places. An Igorroti brought me a nestling on the top of Mount Data in January.

Iris dark brown; bill horny grey; feet pale greyish blue.

244. Chrysocolaptes Rufo-Punctatus Hargitt. (Grant, Ibis, 1897, p. 245.)

Common in the forests of Samar and Leite,

245. Chrysocolaptes xanthocephalus Walden & Layard. (Grant, Ibis, 1896, p. 558.)

Fairly common in the big forest at the base of Canloön, in Negros.

Iris brown; bill dull greyish green, base of lower mandible dull greyish yellow; feet dull ochreous yellow.

Though no member of this genus has been recorded from the island of Mindoro, I am almost certain that it occurs there, for I have noted down in my journal that I saw a *Chrysocolaptes* fly over my tent on 4th November, 1895.

246. MICROSTICTUS FULIGINOSUS Tweedd. (Grant, Ibis, 1897, p. 246.)

This genus of Woodpeckers is known only from the eastern islands of the Philippines, not being recorded either from Mindoro or the Negros group of islands. It was somewhat rare in the islands of Samar and Leite.

Iris pale straw-yellow; bill greyish white; feet dull greyish blue.

247. Microstictus funebris (Valenc.). (Grant, Ibis, 1894, p. 410; 1895, p. 115; 1896, p. 123.)

In Luzon this species is by no means rare and is found in thick forests. It was also met with in the island of Catanduanes. 248. THRIPONAX JAVENSIS (Horsf.). (Grant, Ibis, 1894,

pp. 409, 520.)

This widely-dispersed species has a peculiar distribution in the Philippines, having been met with only in Luzon and Mindanao, while the intermediate islands are inhabited by other species. From Samar and Leite we have a very distinct species, *T. pectoralis*, from Negros a form inseparable from *T. hargitti* of Palawan, and from Mindoro *T. mindorensis*, closely allied to the Palawan Woodpecker.

All the members of this genus inhabit the thick forest, being rarely found outside; but in the breeding-season the solitary dead tree-trunks, often some distance from the forest,

seem to be in request.

We met with *T. javensis* among the oak-trees on the summit of Monte Data at nearly 8000 feet.

249. Thriponax pectoralis Tweedd. (Grant, Ibis, 1897, p. 246.)

This fine Woodpecker was not rare in the forests of Samar and Leite.

Iris straw-yellow; upper mandible greyish black, lower dull slate-blue; feet dull slate-blue.

250. Thriponax mindorensis Steere. (Grant, Ibis, 1896, p. 473.)

Fairly common in the forests of Mindoro.

Iris straw-yellow; bill slaty black; feet dull slate-grey.

251. Thriponax hargitti Sharpe. (Grant, Ibis, 1896, p. 558.)

That the Mindoro species should be different, and the Panay and Negros bird the same as the Palawan Woodpecker, is another remarkable point in the distribution of Philippine birds.

 $Jr. \ \mathcal{J}$. Iris greyish white; feet and lower mandible slateblue; upper mandible black, tipped and based with white.

252. Xantholæma нæматосернаla (P. L. S. Müller). (Grant, Ibis, 1895, p. 466; 1896, p. 474; 1897, p. 247.) Common in Luzon. Generally found in or near high

forest. Like other members of the genus, this Barbet is fond of sitting alone on the dead branch of some high tree, from whence it keeps up a continual "booh-booh" note for hours at a time. This species was also obtained in Mindoro, Samar, and Leite.

Iris dark brown; eyelids and feet coral-red; bill black.

253. XANTHOLÆMA INTERMEDIA Shelley.

Xantholæma rosea (Dumont). (Grant, Ibis, 1896, p. 558.) This species is supposed to be hardly separable from X. rosea of Java; it is fairly common in Negros.

254. Surniculus velutinus Sharpe. (Grant, Ibis, 1894, p. 410; 1896, p. 559; 1897, p. 247.)

This small black Cuckoo is met with singly in most of the larger Philippine Islands; it frequents large forests. Surniculus is a genus believed by some to mimic the Crow-Shrikes, and, on account of its close resemblance to Dicrurus, is supposed to deposit its egg in the nest of that genus. In Negros and those islands inhabited by D. mirabilis this theory of mimicry cannot hold.

Eye dark brown; bill and feet black.

255. HIEROCOCCYX SPARVERIOIDES (Vig.). (Grant, Ibis, 1896, p. 559.)

One specimen obtained on Canloön volcano, Negros.

256. Cuculus micropterus Gould. (Grant, Ibis, 1896, p. 560.)

One specimen, same as the above.

257. CACOMANTIS MERULINUS (Scop.). (Grant, Ibis, 1894, p. 520; 1896, pp. 474, 560.)

This small Cuckoo is common throughout the Philippines. It is found often at considerable altitudes in Luzon, and was common at nearly 7000 feet in Negros.

258. Chalcococcyx xanthornynchus (Horsf.). (Shelley, B. M. C. xix. p. 289; Grant, Ibis, 1897, p. 210.)

One specimen was shot in the forests of Samar, which was unfortunately burnt along with the rest of the collection.

d. Iris lake-red; orbital skin vermilion; bill orange, vermilion at base; feet olive-brown, soles yellow.

259. Eudynamis mindanensis (Linn.). (Grant, Ibis, 1894, p. 520; 1895, p. 115; 1896, p. 474; 1897, p. 247.)

Found commonly throughout the archipelago, inhabiting the high forest. We obtained a bird of considerably larger dimensions in Fuga Island, but as only the male was met with it is impossible to say whether it represents a distinct species.

3. Iris scarlet-lake; bill light pea-green; legs horny

lead-blue.

- Q. Iris scarlet-lake; bill light pea-green; legs dull greenish brown.
- 260. Centropus mindorensis (Steere). (Grant, Ibis, 1896, p. 475.)

This species is apparently confined to Mindoro; like th two following species, it is a lover of thick tangled growth in fairly open country.

Iris lake-red; bill black; feet greenish black.

261. Centropus viridis (Scop.). (Grant, Ibis, 1894, p. 410; 1895, p. 466; 1897, p. 247.)

Common in all the open country, and ranging throughout the entire archipelago.

262. Centropus Javanicus (Dumont). (Grant, Ibis, 1894, p. 520; 1896, p. 474.)

Like the preceding species in distribution and habits; especially fond of coarse lalang-grass plains, where a few tangled thickets are to be met with. *C. javanicus*, unlike the last-named two species, which are confined to the Philippines, is widely distributed throughout Malaya.

263. CENTROPUS MELANOPS Less. (Grant, Ibis, 1897, p. 247.)

This handsome Cuckoo is fairly common in Samar and Leite, where, unlike the last three species mentioned, it frequents the tops of high trees in old forest, though it is at times met with in neglected clearings.

Iris lake-red; bill and feet black.

264. Centropus steerii B. & W. (Grant, Ibis, 1896, p. 474.)

This fine Cuckoo, like C. melanops, frequents high foresttrees; it is apparently confined to Mindoro.

265. Centropus unirufus (Cab. & Heine). (Grant, Ibis, 1894, p. 410.)

This curious Cuckoo is confined to Luzon, where it is by no means common. We met with it only in the bamboojungles at the base of Monte Arayat.

266. Lepidogrammus cumingi (Fraser). (Grant, Ibis, 1894, p. 520; 1895, p. 466; 1896, p. 123.)

Common in the forests of Luzon, reaching an altitude of nearly 7000 feet in the central Cordillera in Lepanto. Like C. unirufus this Cuckoo haunts the thick tangles of creepers and low branches of trees. The crop of a bird shot in Benguet contained a nearly perfect specimen of a Flying Lizard (Draco sp. inc.). Sometimes the stomach is full of strong-smelling bugs, making the bird a most objectionable subject for a post mortem.

Iris lake-red; orbital skin dull pink; feet light horny cobalt-blue. In the young the iris is brown.

267. Dasylophus superciliosus (Cuv.). (Grant, Ibis, 1894, p. 410; 1896, p. 123.)

This and the previous species are, perhaps, the most remarkable birds in Luzon, and are probably confined to this and the small neighbouring islands. This species was obtained by us in Catanduanes, and has been found in Marinduque by other collectors. The young bird described in 'The Ibis' (1895, p. 262) under Lepidogrammus cumingi is really the nestling of this species. In the forests this Cuckoo frequents the middle growth and the lower branches of high trees, hopping and creeping in the tangled masses of creepers after snails, beetles, and other insects. As many beetles fall to the ground the instant they feel the least shock on the bough on which they are resting, the Cuckoo is continually dropping to the earth to secure them. A female shot at Engaño on

1st of May contained a white egg, which was unfortunately broken before she was skinned.

Iris yellow; bare skin on face king's yellow; upper mandible pea-green, orange spot at base; lower mandible yellowish green, at tip pea-green, base orange; feet yellow.

268. CACATUA HÆMATUROPYGIA (P. L. S. Müller). (Grant, Ibis, 1895, p. 263; 1896, pp. 475, 560; 1897, p. 248.)

Met with throughout the entire archipelago, but, curiously enough, we never noticed a single Cockatoo in the valley of the Rio Grande. During our expedition to the Province of Isabella, the natives told me that this species was not known to them; and also during my trip to Cape Engaño, in the north-east of Luzon, we found it absent. So perhaps the species does not pass the high mountains which divide Luzon at 16° longitude.

269. Prioniturus discurus (Vieill.). (Grant, Ibis, 1895, p. 263; 1896, p. 560; 1897, p. 248.)

Met with by us in Catanduanes, Samar, Leite, and Negros. The habits of all the members of this genus are very similar; they are more often noticed on the wing, flying swiftly over the forest at great heights, uttering shrill screeches, than when perched quietly among the green leaves of the high trees, in which they move with slow deliberation. They nest often in large colonies in old tree-trunks, which remain standing for years in the native clearings; these trees are of great height and riddled with the borings of various Woodpeckers, more especially of the species of *Thriponax*.

Iris black; bill and feet bluish white.

270. Prioniturus mindorensis Steere. (Grant, Ibis 1896, p. 475.)

Fairly common in the forests of Mindoro, my specimens having been obtained on Monte Dulangan, at an altitude of nearly 5000 feet.

Iris stone-grey; bill white, with a bluish tinge; feet greyish green.

271. Prioniturus Luzonensis Steere. (Grant, Ibis, 1894, p. 410; 1895, pp. 115, 466.)

We found this beautiful species common about the foot of Monte Arayat, in Central Luzon, though we failed to meet with it in Albay or Catanduanes. In North Luzon it was abundant in the maize-fields, feeding on the flower at the top of the plant. Young were obtained in the month of May in Isabella.

272. PRIONITURUS MONTANUS Grant, Ibis, 1895, p. 466.

While resting at the village of St. José, during our weary tramp through the Province of Abra to the highlands of Lepanto, a native brought me a Parrot in a cage, which I at once saw must be either a new species or a bird imported from Celebes. The Indians told me that the Parrot had been snared in their maize-fields, and that it was common enough when the cereal was ripe. They presented the bird to me, and we carried it with us to the summit of Monte Data, and thence to Manila, where it succumbed, probably to the excessive heat. During my expedition to Benguet, on three occasions I fancied I saw a green Parrot, but the birds were so quick on the wing that in the forests it was impossible to shoot them. On reaching the summit of Monte Data, however, we found the bird fairly common, and, just after sunrise on those frosty mornings, small flocks would dash round about our camp among the pine-trees with noisy screeches. It seems curious that such a thoroughly tropicallooking bird should prefer the cold of Monte Data, where it freezes nightly, to the warm plains below. On our return journey through Abra, this species and P. luzonensis were found frequenting the same maize-fields.

Iris dark brown; bill and feet whitish lead-blue.

273. TANYGNATHUS LUCONENSIS (Linn.). (Grant, Ibis, 1894, p. 410; 1896, pp. 475, 561; 1897, p. 248.)

Common and met with in all the larger Philippine Islands, nesting in numbers in old tree-trunks in the month of June in Samar.

Iris pale straw-yellow, with an inner ring of brown; upper ser. vii.—vol. v. 2 E

mandible rosy red; lower mandible pale pinkish red; feet olive-brown.

274. Tanygnathus everetti Tweedd. (Grant, Ibis, 1895, p. 116; 1896, p. 562.)

This Parrot may prove to have a much wider distribution in the Philippines than is at present known, our discovery of the bird in North Luzon being a mere chance. At a distance it so closely resembles the common *T. luconensis* that one does not like to keep continually shooting at *Tanygnathi* in the hopes of obtaining a specimen now and then.

- 3. Iris orange; bill rosy red; feet dull olive-brown.
- 9. Iris orange; bill creamy white; feet dull olive-brown.

275. Bolbopsittacus lunulatus (Scop.). (Grant, Ibis, 1894, p. 410; 1895, p. 467; 1896, p. 124.)

This curious little Parrot is apparently confined to Luzon, where it is by no means rare; it is generally met with in neglected clearings and low forest.

276. Bolbopsittacus intermedius (Salvad.). (Grant, Ibis, 1897, p. 248.)

This species closely resembles the preceding, but the blue on the face and collar is always darker; in Samar and Leite it is common, inhabiting localities that are open.

277. Loriculus Philippensis (P. L. S. Müller). (Grant, Ibis, 1894, pp. 410, 521; 1895, p. 264; 1896, p. 124.)

Loriculus is one of the most interesting Philippine genera, being found throughout the entire group, but differing in the various islands sufficiently to require no less than eight very distinct species to be formed of it.

L. philippensis was common in Luzon and obtained in Benguet at an altitude of 4000 feet. It is somewhat remarkable that no species of Loriculus inhabits the Palawan group, considering that the genus also occurs to the south in Borneo.

278. Loriculus mindorensis Steere. (Grant, Ibis, 1896, p. 476.)

Obtained by us in Mindoro.

